ABSTRACT

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An object of this power supply device is to enable an overheat protection level and an overvoltage protection level to be set accurately. This power supply device includes a Schottky barrier diode (D52), which is placed as a temperature detection element at a region where a temperature is measured, to which a reverse voltage is applied, and through which a reverse leakage current flows; a comparator (Z51) which sets a potential of an output terminal thereof to a low level when a voltage corresponding to the reverse leakage current becomes equal to or more than a reference voltage; and a light-emitting diode (PC2) which is connected between an output terminal (8a) and the output terminal of the comparator (Z51), and has a current of a predetermined value or more flowing therethrough to emit light because the output potential of the comparator (Z51) is set to the low level, wherein an operation of a control circuit (12) is stopped by a thyristor (TH1) which is turned on, based on the current flowing through a phototransistor PC1, in response to the light emission of the light-emitting diode (PC2).

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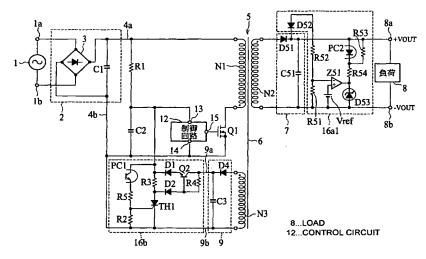
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(54) Title: POWER SUPPLY DEVICE

(54) 発明の名称: 電源装置



(57) Abstract: A power supply device has an object to enable accurate setting of an excessive heat protection level and an excessive voltage protection level. The power supply device includes: a shot key barrier diode (D52) arranged as a temperature detection element in a temperature measurement portion, to which diode a reverse-direction current is applied so that a reverse-direction leak current flows in the diode; a comparator (Z51) for setting the output terminal potential to a low level when the voltage corresponding to the reverse-direction leak current exceeds a reference voltage; and a light emitting diode (PC2) connected between an output terminal (8a) and an output terminal of the comparator (Z51) and emitting light when the output potential of the comparator (Z51) has become low level and current exceeds a predetermined value flows. Operation of a control circuit (12) is stopped by a thyristor (TH1) which has turned on according to the current flowing in a photo transistor (PC1) in response to the light emission of the light emitting diode (PC2).

(57) 要約: 本電源装置は、過熱保護レベル及び過電圧保護レベルの正確な設定を可能にすることを課題とし、温度 検出素子として被温度測定部位に配置され、逆方向電圧が印加され、逆方向漏れ電流が流れるショットキバリアダ イオード(D52)と、逆方向漏れ電流に応じた電圧が基準電圧以上になった時に出力端子の電位を低レベルにす るコンパレータ(251)と、出力端子(8a)とコンパレータ(251)の出力端子との間に接続され、コン